

CACTUS AND SUCCULENT JOURNAL

Of the Cactus And Succulent Society
Of America

VOL. VII

AUGUST, 1935

No. 2



Dudleya pulverulenta in San Francisquito Canyon. A plant that attracts attention to its beauty of form and color by reflecting flashes of sunlight from its lofty perch on unscalable cliffs. (See page 18).



CACTUS AND SUCCULENT JOURNAL

Published and Owned by The Cactus and Succulent Society of America, 6162 N. Figueroa St., Los Angeles, California (Mail Address Only). A monthly magazine to promote the Society and devoted to Cacti and Succulents for the dissemination of knowledge and the recording of hitherto unpublished data in order that the culture and study of these particular plants may attain the popularity which is justly theirs. (Membership and subscription \$3.00 per year. Foreign \$3.00 per year by International money order.) Mail application to SCOTT HASELTON, Editor, 6162 N. Figueroa St., Los Angeles, Calif. Editorial Staff: EDGAR M. BAXTER, Bellflower, Calif.; CLARENCE L. CLUM, 2443 Echo Park Ave., Los Angeles, Calif.; ERIC WALTHER, 2667 McAllister St., San Francisco, Calif.

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DUDLEYA PULVERULENTA

By EDGAR M. BAXTER

California succulent gardens have overlooked one of the grandest groups of plants to be found under the classification of "succulent"—the native species of *Dudleya*. The genus was named for Professor William R. Dudley of Stanford University by Drs. Britton and Rose. Species were formerly classed with *Echeveria* and *Cotyledon*. The name "stonecrop" and "hen and chickens" is applied to these plants, the latter name often, too, to species of *Echeveria*.

The largest and most noticeable of the Californian *Dudleyas* is *Dudleya pulverulenta*, a huge, white rose that reflects the sunlight in a dazzling flash from the brink of a hillside cliff. New growth upon which rain has not fallen is snow white with a pulverulence of sticky white flour. Flower stalk, flower stems, and even the sepals are covered heavy with this powder.

Its sparkling whiteness calls attention to the plant, but because of its habit of growing on the very edge of high dirt cliffs it manages to escape the clutches of nature despoilers. Seeds may as easily be collected and with ordinary care will grow into beautifully symmetrical plants in a couple of year's time. The species is distributed in coastal canyons from Santa Barbara south. It grows as far inland as the powerhouse in upper San Fran-

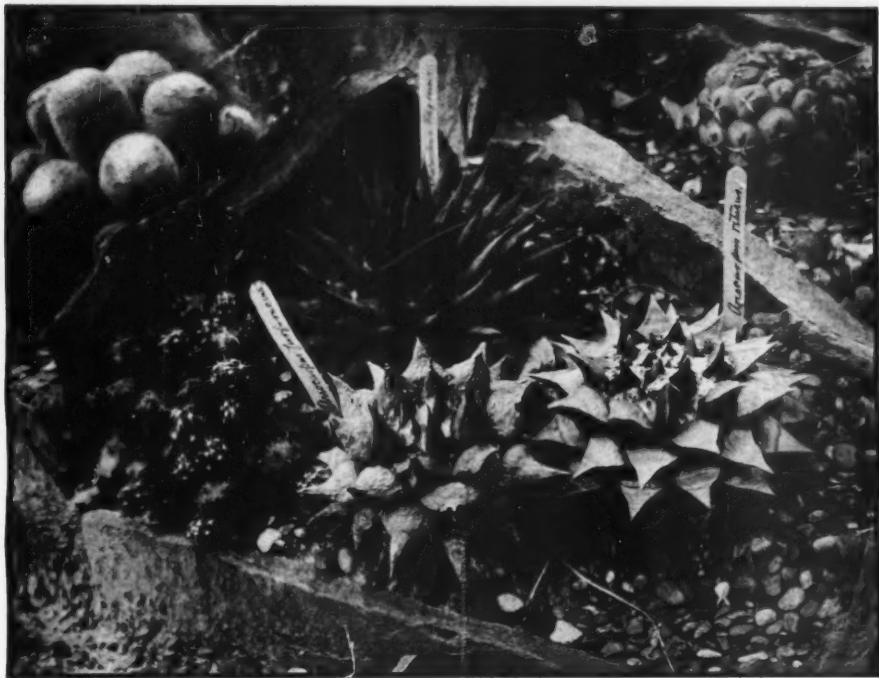
cisquito Canyon, but is rare there. Orange County has it most commonly.

The leaves of the plant grow from a woody root stalk in a rosette. They are strap-like, sometimes more than a foot long and several inches wide, pointed at the outer end. Plants are often a foot and a half across. Frost does not affect the plant severely, but it will not stand too much water.

Dudleyas may be used on slopes for masses in landscaping, or may serve as specimen plants in rock gardens or pots. Several species have flowers of sufficient abundance and color to be used for decorative effect as cut flowers.

An odd fact in connection with *Dudleya pulverulenta* is that always nearby, may be found another species, *Dudleya lanceolata*. The latter is a deep green colored plant, seldom six inches in diameter, growing in the shade near moist spots below the dry home of its big white relative. The green *Dudleya* does not always have an associate, but is to be found very close when a plant of *Dudleya pulverulenta* is seen.

Dudleyas are found from Oregon to the cape of Baja California and in Arizona. The genus is one that should be better known by fanciers, particularly those who live in California. Surely there was never a "prophet without honor" so neglected as are the beautiful plants here named.



Ariocarpus

By DR. W. E. LOWRY, SR.

THE CACTACEAE, Britton and Rose, recognize only three species in this genus, *Ariocarpus fissuratus*, *A. kotschoubeyanus* and *A. retusus*, and regard *A. furfuraceus* and *A. trigonus* as synonyms of *A. retusus*. This error undoubtedly occurred through a lack of material for study and reliance upon incorrect and incomplete descriptions. The accompanying photograph illustrates the difference better than any verbal description.

A. trigonus, *A. retusus* and *A. furfuraceus* are alike in the thick carrot-like root, the triangular tubercles and the wooly axils, but are otherwise amply separated by differences in the color of plant and flower and size and shape of the tubercles.

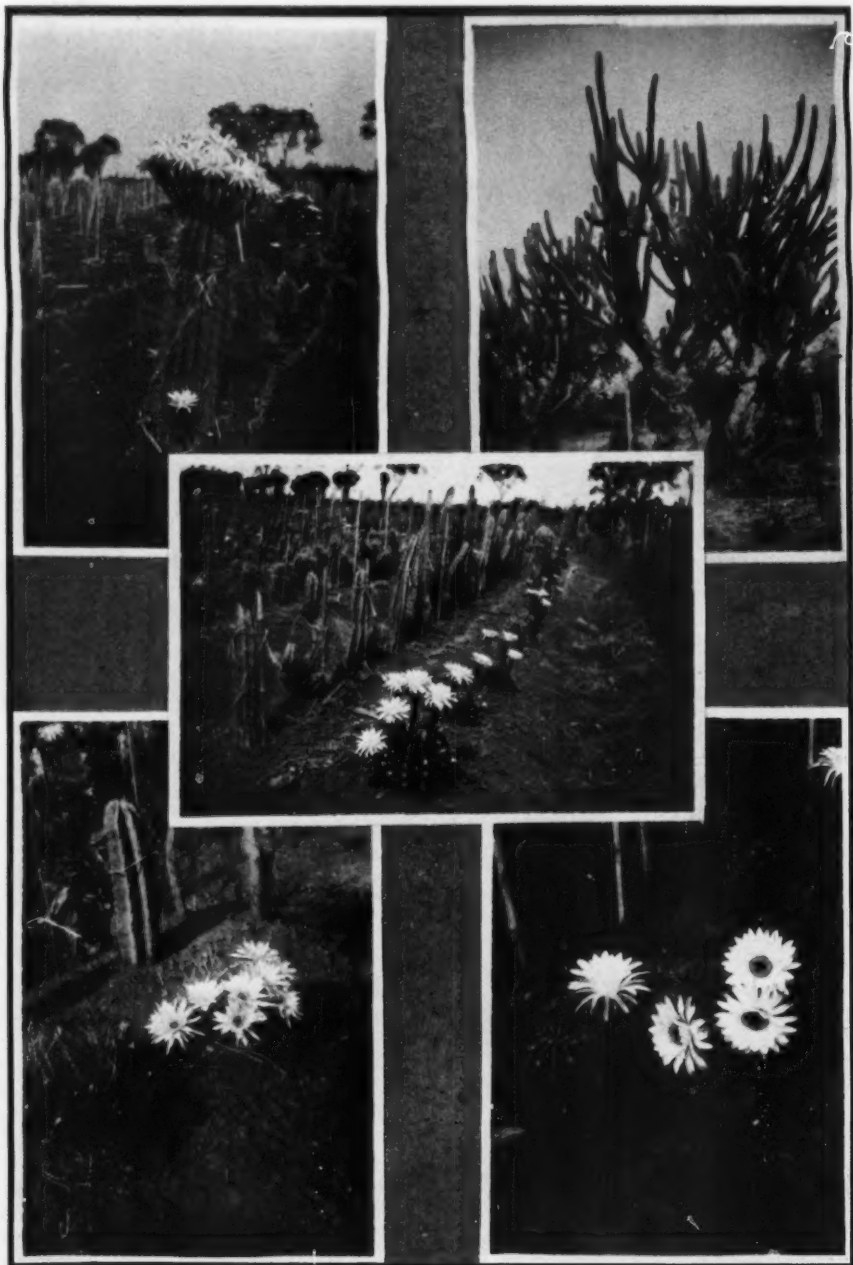
A. trigonus (upper center) is a dark green plant with long slender tubercles which in nature are usually erect or incurved, giving the plant a marked agave-like appearance. The flower is large and a rich yellow.

A. furfuraceus (lower center) is more

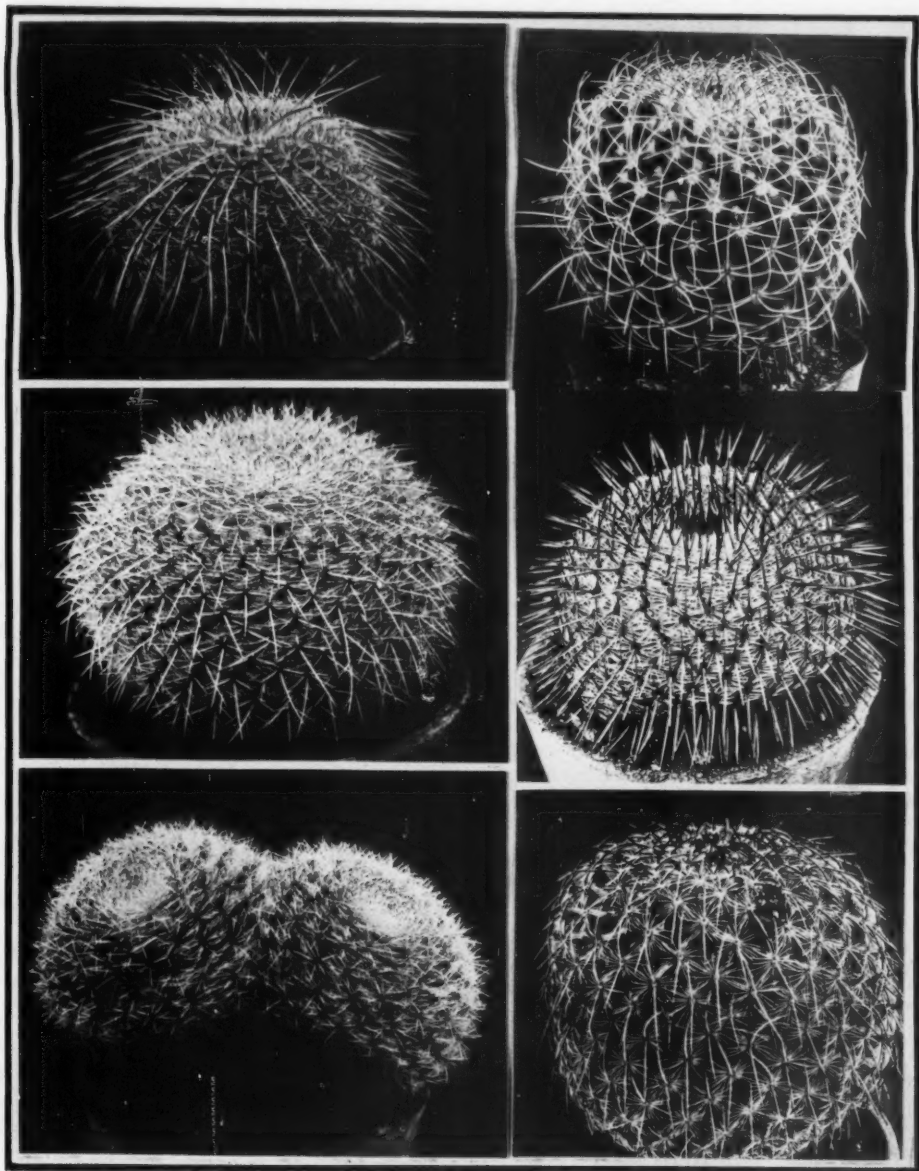
similar to *A. retusus*, but differs in the rounded, bellied tubercles and in the usual presence of a small wooly areole about 5 mm. from the tip of the tubercle and in a well defined chin on the lower border of each tubercle.

A. retusus has short triangular tubercles, almost flat on the surfaces with the angled borders making a straight line from base to tip. It lacks the chin on the lower border and the areole is microscopic or lacking and when present is located at the very end of the tubercle.

Both *A. furfuraceus* and *A. retusus* are gray-green, glaucous plants and both have large white flowers, broader but shorter than the flower of *A. trigonus*. The other cacti shown in the photograph are *Neomammillaria albicans* (upper left) *Thelocactus hexaedrophorus* (upper right) and *Opuntia moelleriana* (lower left).



UPPER LEFT: *Echinopsis tubiflora* with 38 flowers open. A border of *Gymnocalycium* in front of this row of *Echinopsis* causes us to envy this Argentine collector. LOWER LEFT: An unknown cactus, probably an *Echinopsis*, in flower and bud. CENTER: *Echinopsis oxygona*. Collected specimens becoming acclimatized in the nursery grounds of "Las Pencas" Nursery in western Argentina. UPPER RIGHT: *Stetsonia coryne* in its habitat in Santiago del Estero, Argentina. LOWER RIGHT: Smaller plants of *Echinopsis tubiflora* showing details of the flower. Pictures from Las Pencas Cactus Nursery.



A GROUP OF NEW MEXICAN NEOMAMMILLARIAS

These were published in various German periodicals as new species of *Mammillaria*. The published name is given here.

Mammillaria Dietrichae

Mammillaria Tiegeliana (?)

Mammillaria Morganiana Tieg.

Mammillaria Hoffmanniana

Mammillaria Vaupeli Tieg.

Mammillaria calacantha Tieg.

Photographs are from Ferdinand Schmoll, Society member and collector, Queretaro, Mexico.

BOOK REVIEWS

California Cactus by E. M. Baxter. 100 pages 8x11, 85 illustrations and full color frontispiece. Published at Abbey San Encino Press, Los Angeles, Cal. For sale by the author, Bellflower, Calif. Sewed book with servicable heavy imitation leather cover \$1.50; Cloth bound \$2.50.

After 10 years study of the native cacti of California, E. M. Baxter presents to the cactus world the only complete book on the native cacti of California. The author, who is President of the Cactus and Succulent Society of America, has obtained all the information first hand and has personally visited and photographed each of the species in their native habitat. The 39 species include two new species never before described.

Many species, forgotten or abandoned by authorities, have been restored to their proper places. Old publications have been searched for accurate naming of rare species, and field trips have been made to type localities for positive identification. The book is complete and will stand for years to come as the authority on California cactus. A glossary of common names is valuable for local identification.

This complete work is essential for reference in all libraries, colleges, schools, garden clubs, study groups, commercial dealers and collectors. The accuracy of the information contained will place this book among the best in cactus literature.

SUCCULENT PLANTS by H. Jacobsen, Curator of the Botanical Gardens, Kiel. Translated by Vera Higgins, M.A., F.R.H.S., Secretary of the Cactus and Succulent Society of Great Britain. Published by Williams & Norgate Ltd., London. 294 pages and 277 illustrations. \$6.25.

This book is a translation of the author's *Die Sukkulenten* (Paul Parey, Berlin, 1933) together with much additional material and 58 additional photographs supplied by the author. Although numerous monographs have been published on the various genera of succulent plants, a general handbook on the subject has been badly needed. The appearance in 1933 of *Die Sukkulenten*, by H. Jacobsen, was therefore heartily welcomed, for it describes most of the succulents (excluding Cacti) met with in cultivation at the present time, not excepting many of the rarer species. Full botanical descriptions of the species are not given, but such characteristic features of each plant are enumerated

as will enable the possessor to identify the plants in his collection. The excellent descriptions are enhanced by numerous photographs of the plants, which will afford much assistance in naming a collection. The illustrations include some 300 species, as in many cases two or three species are shown in one picture; this procedure is very helpful as it enables a direct comparison to be made of similar plants without the uncertainty as to their relative size.

Without attempting to give a complete list of all the genera dealt with, the following particulars will suffice to indicate the scope of the work. Eleven species of *Adromischus* are described, 30 *Aeoniums*, 29 *Agaves*, 28 *Aloes*, 94 *Euphorbias*, etc.; the *Mesembrianthemums* are subdivided into the genera proposed by Dr. N. E. Brown in his revision of the group and are alphabetically arranged under the general heading of *Mesembrianthemum*. The most frequently occurring synonyms are quoted and copious cross-references in the list of species, which are arranged in alphabetical order, renders the finding of any particular description an easy matter.

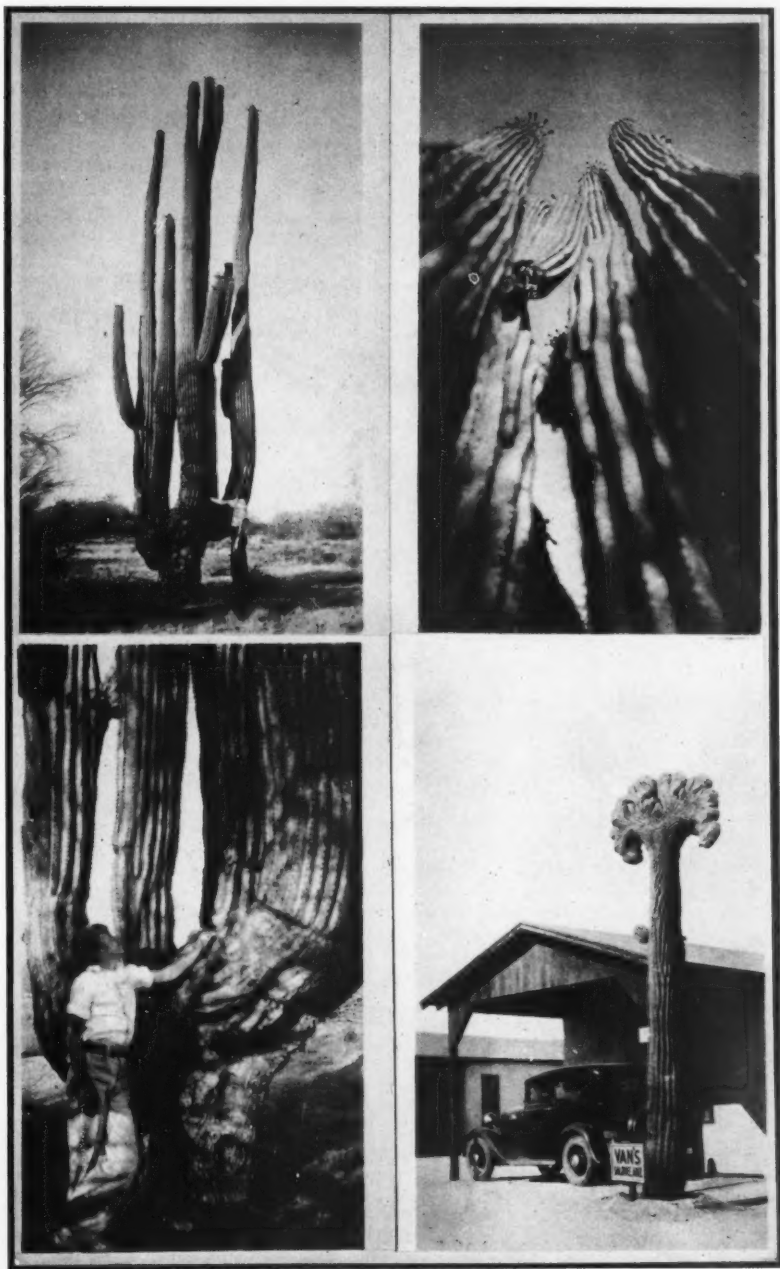
The English edition contains descriptions of 151 genera and 1087 species, and is more complete and more useful than the original German edition.

Orders may be sent direct to the publisher or to the Editor of the Cactus Journal.

CACTUS AND OTHER SUCCULENTS by W. T. Neale, Meeching Rise Nurseries, Newhaven, Sussex, England. 200 pages 6x9 with 160 illustrations. Copies may be secured from the author: cloth bound 4s, paper 2d.

Mr. Neale, who has long been a loyal member of the Society, has a new unique "Book-Catalogue." The first 30 pages are devoted to introductory material, propagation and cultural information. The next 120 pages comprise a list of cacti and the other succulents which are grown or stocked by the author in his nursery. The readable descriptions of the various genera and species is not intended to be a scientific treatise, but is an attempt to interest the beginner and amateur. After each description is the price and a key denoting seeds, plants, with pots, or specimen plants.

The list represents a great amount of work and contains a vast amount of information for the beginner. A price list of this nature will be treasured indefinitely and should prove profitable to the author.

**CARNEGIEIA GIGANTEA—MASSIVE AND MONSTROSE**

Ye Ed. finds a plant for his cactus bowl. The extremes in the sizes of cacti are most interesting. Upper right shows a sky-scraper view of these columns, weighing tons, as they sway in the wind. Lower left shows the size of the trunk compared with Ed. Jr. Lower right shows a perfectly crested plant of the Arizona Giant Cactus moved into town at Salome, Arizona. This picture is from Ernest Roepke, Pacific Beach, California.

PROLIFEROUS CEREI

It is very well known that members of the OPUNTIEAE Tribe have proliferous fruit, i. e., new shoots or flower buds grow from the seed pods while still on the plant. In the genus *Opuntia* this is very strikingly shown in the LEPTOCAULES and FULGIDAE Series and also in the genus *Pereskioopsis*.

I was very much surprised, recently, to find two buds developing on a seed pod of *Wilcoxia senilis*, (in the CEREAE Tribe) one of which has developed into a flower bud and the other into a normal branch. This is on a grafted plant.

I grafted some *Wilcoxia australis* which soon began to send many flower buds while only one showed any signs of new shoots. Desiring to have plenty of shoots, the plants were disbudded and a few weeks later the new shoots (about an inch long prior to disbudding) developed into flower buds at the ends. The flowers were perfectly normal in shape and color. Now the question is: How much of the shoots will develop into seed pods and how much will remain true vegetative growth.

TED HUTCHINSON.

BRITTON & ROSE NOMENCLATURE ACCEPTED IN EUROPE

Harry Johnson
Johnson Water Gardens, Haynes, Calif.

I thank you very much for your help. I do not know if people in the United States know well that I am fighting here on a lonely front for the American system of Britton and Rose. My new Danish cactus book (which I am writing together with Count Knuth), Mrs. Higgins last book "Study of Cacti," and my bulletin will surely have the success (as one sees from Kew Gardens, where cacti are now being labeled according to Britton and Rose) that the American System, as we call it, will be continued on the continent. You will understand that there are other systems, but I feel quite uncertain if they will be able to substitute it by a better one. I changed very little of this system of Dr. Rose only according to what we have learned about hitherto little known genera. I hope to have come to a logical and simple solution.

Further, I see no possibility to have all new material combined in a single work as we find it in Britton and Rose's "Cactaceae" if it is not done in a bulletin like mine. A large book is very expensive you know, no-

body can take the risk of such an edition. But it *must* be done as there is such a lot of material to be described of which only a few will know. Only in an edition like mine in four languages is there a possibility to make it. You will receive within a short time a completely arranged edition in one book, as soon as the April part is out then we will have a good idea of the whole work and how it is arranged. It is not a bulletin but a real book that can be subscribed for and will never become complete or incomplete. Single parts at any time can be changed. New species can always be placed in the right place under its genus, etc.

CURT BACKEBERG

EDITOR'S NOTE: Mr. Backeberg has been a member of the Society for years and we in America, in fact all over the world, appreciate the constructive field work he is doing. Part of Mr. Backeberg's success is due to his recognition of Britton and Rose nomenclature which was adopted by the Cactus Journal in 1929.

In Memoriam

It is with regret that we record the passing of our estimable friend and fellow member, Dr. R. H. Pulliène, of Adelaide, Australia.

His death occurred on June 18, following a short illness. Mr. Herbert J. Solomon of Sidney, his friend for many years, writes:

"Dr. Pulliène was a very wonderful man with an extraordinarily good memory and a vast knowledge. Amongst his many qualifications was that of leading Eye, Ear, Nose and Throat specialist; one of the world's authorities on spiders, which he studied for many years; he was an authority on Entomology and a trained botanist; he held many public positions such as: President of the Royal Geographical and Anthropological Societies of South Australia, Member of the Royal Society, Chairman of the Linnean Society, Fellow of the Royal Australasian College of Surgeons, and Lecturer at the Adelaide University. He had many other scientific interests. He was one of the most genial and placid companions and was always glad to help anybody who was interested in any of his specialties. We will all miss him very much."

Dr. Pulliène was one of the first members of the Society and was most helpful and encouraging in aiding many of the first collectors of succulent plants in the United States. Many references will be found in the early issues of the Journals. He carried on a large correspondence with members, particularly with Messrs. Alain White and Boyd L. Sloane, his contributions to their work "THE STAPELIEAE" being of great material assistance. Many will remember his trip to the United States in 1930 when he visited many gardens in Southern California.

The following 8 pages are the eighth installment of Britton and Rose "The Cactaceae" Vol. II.

EDITOR'S NOTE

While I was making an 8000 mile automobile trip, E. M. Baxter was toiling over this issue of the Journal. Besides writing books and being President of the Society, among other duties, he found time to help on this August issue. Some of the photos have been accumulating for some time and many of the names of the plants are published as received. We welcome at all times letters commenting on or questioning names; it is through such discussions that debatable names are corrected. Many of these pictures are of rare plants, but our plan is now to show series of plants commonly found in collections and to print a readable description that will help the amateur.

This year your Editor will devote his full time to publishing scientific books and his hobby will continue to be the Cactus Journal. The improvement of the magazine will depend upon your co-operation. Send in an avalanche of copy, pictures, and suggestions for educational material. After weathering all depressions we have the largest membership the Society has ever known, but in order to carry out a real educational plan we must reach a membership of 2000 this year and this should not be difficult with the ever increasing interest all over the country.

If you like this issue of the Journal please let us know. Will you help to put over an educational plan?

SCOTT E. HASELTON.

LIBERTY HYDE BAILEY HORTORIUM

The following will be of special interest since Dr. L. H. Bailey is a member of the Society and has contributed to the Cactus Journal. His many books are known to the cactus world.

Ithaca, N. Y.—One of the largest private herbariums in the country, including one of the most comprehensive records of the cultivated plants of the world, has just become the property of Cornell University as the result of the gift of Dr. and Mrs. Liberty Hyde Bailey, famous botanist and professor emeritus at Cornell, it was announced today by the Board of Trustees. The collection, which will be designated by the University as the Liberty Hyde Bailey Hortorium, represents one of the most valuable scientific additions the University has ever acquired.

A hortorium, according to Dr. Bailey, is a hortobotanical establishment and enterprise. The word was coined to designate the Bailey establishment, which comprises upwards of 125,000 mounted herbarium sheets and other similar material specially rich in the cultivated floras of the world and comprising types of new species in the palms, Carex, Vitis, Rubus and other groups; 4,000 technical or professional books germane thereto; thousands of photographs; a garden area on which to grow plants of record; card indices and working equipment. The herbarium collection comprises specimens of wild and cultivated plants from any part of the world from the mosses up through the ferns and the higher plants. For the past fifteen years illustrated publications have issued now and then from the establishment under the general title *Gentes Herbarum* ("The Kinds of Plants").

The collection is considered unusually valuable since many of the specimens are not duplicated elsewhere. The extensive record of the cultivated

plants of the world which it represents makes it unique since most botanical herbaria consist chiefly of wild plants and pay little attention to cultivated plants.

In offering this great scientific collection to the University, Dr. Bailey states:

"The value of these collections depends on the use that is made of them. The accumulations have been assembled over many years with the hope that they may constitute the basis of a departure in education and research, a new unit unlike any now in existence and which need not duplicate the field of any other department. Its primary purpose is to record and study the cultivated flora of the world to the end that the species may be accurately identified as a scientific basis in horticulture, plant-breeding, pathology, and any other departments of knowledge that work with domesticated plants; and to provide archives of the plants that men at any time or place may grow."

The University has authorized the establishment of an administrative unit in the College of Agriculture to be known as the Liberty Hyde Bailey Hortorium, and to be placed under the direct supervision of a staff member. A full time curator, whose duty shall be the general care and supervision of the Hortorium, will also be appointed. Other provisions for the maintenance of the Hortorium will include an advisory board consisting of representatives of the major fields of Plant Science and two members at large appointed by the President of the University, together with the supervisor of the Hortorium and the curator.

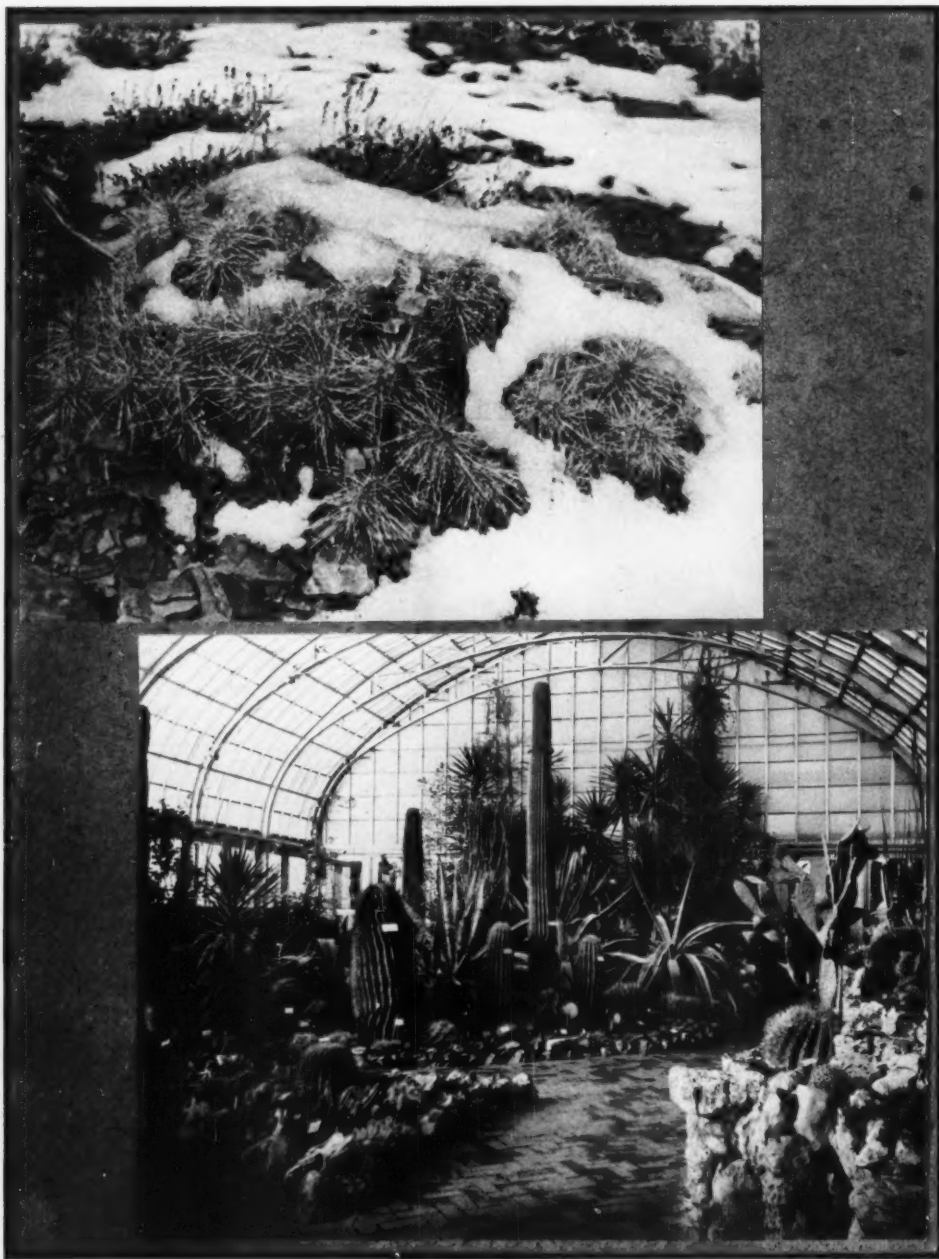
One or more graduate fellowships, to be known as the Liberty Hyde Bailey Botanical Fellowships, will also be established to make it possible to bring brilliant young botanists to Cornell for graduate work.

Dr. Bailey was successively Professor of Horticulture, Director, and Dean of the College of Agriculture at Cornell University and of the Cornell University Agricultural Experiment Station from 1888 to his retirement in 1913. In 1908-09 he was chairman of the Roosevelt Country Life Commission. He is regarded as the foremost living author and editor in the field of agricultural literature. As an explorer and collector of plant life he has travelled all over the world. The Liberty Hyde Bailey Hortorium will preserve for posterity his distinguished contributions resulting from his life's work.

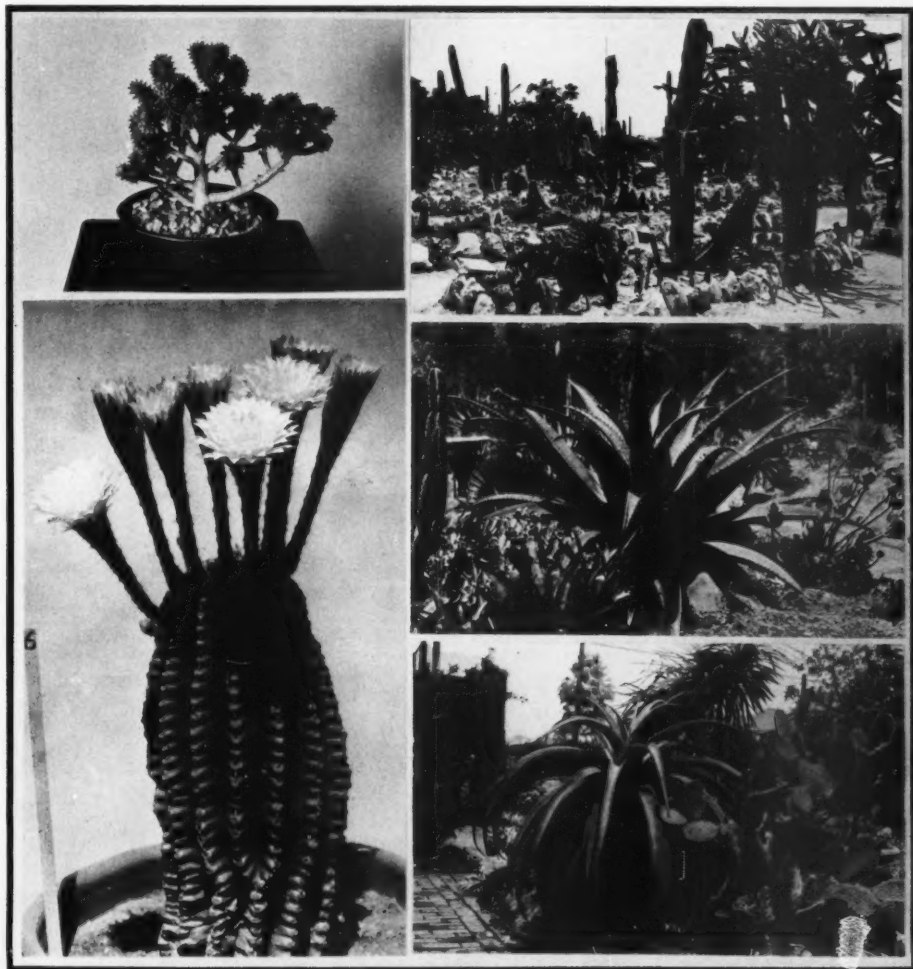
Cactus thieves and vandals seem to be a universal curse as will be noted by the following quotation in a letter from South Africa.

"On my return home from my holiday, I found everything at my home in a very unsatisfactory condition. My house was burglarized twice and my garden was simply destroyed by vandals, who uprooted everything that they could not take away. I had a fine collection of American Cacti that I treasured so much and have not yet discovered who had stolen them—The native I left in charge neglected his duty marvelously well!"

A new departure in the arrangement of the cactus garden in the New York Botanical Garden is now reported to represent a desert garden.



ABOVE: Snow on the mountain. And *Opuntia erinacea* growing in the snow. The picture was taken March 30, at an elevation of 10,000 feet on the west rim of Death Valley, California. It demonstrates the fact that for certain cacti, perfect drainage is more important than temperature. R. W. Poindexter. BELOW: A portion of the cactus and succulent room of the Garfield Park Conservatory, Chicago, Illinois. Of a total of 700 species in the collection, 350 are cacti.



PLANTS AND GARDENS AROUND THE WORLD

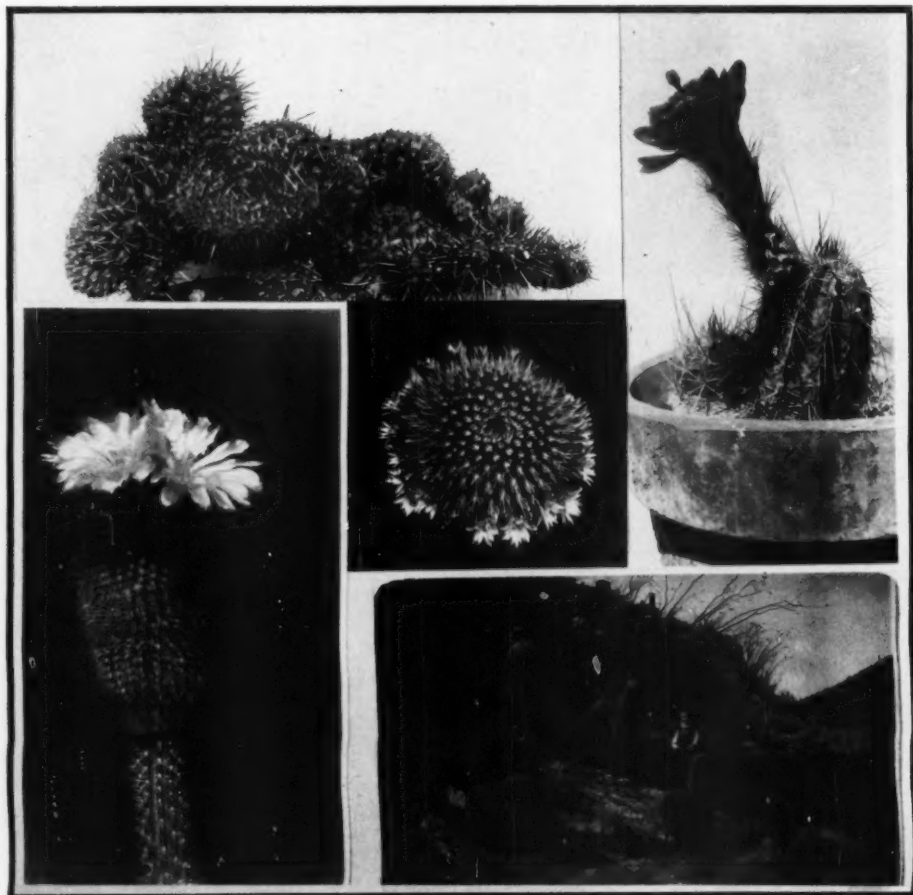
UPPER LEFT: This *Sedum multiceps*, belonging to Mrs. Clarian Steele, Los Angeles, is much admired by Japanese visitors. LOWER LEFT: An *Echinopsis* grown by our first Secretary, R. E. Willis. The plant is 18 inches high, the flower tubes 8 inches. Photograph by Chas. H. Hamilton. UPPER RIGHT: One corner only of the collection of J. F. Parks, Dallas, Texas. Mr. Parks has just returned from a collecting trip to Mexico, and has the finest collection in Texas. CENTER RIGHT: *Aloe candelabriflora* in the collection of Dr. R. H. Pulleine, Australia. This and the following are giant species of the genus. LOWER RIGHT: *Aloe thuaskii* in the garden of Dr. Pulleine.

ANOTHER LIFE MEMBER

"As long as I am living you may continue to send me the Cactus Journal, especially when you keep it up to the high standard you do."

FRANK J. MCCOY.

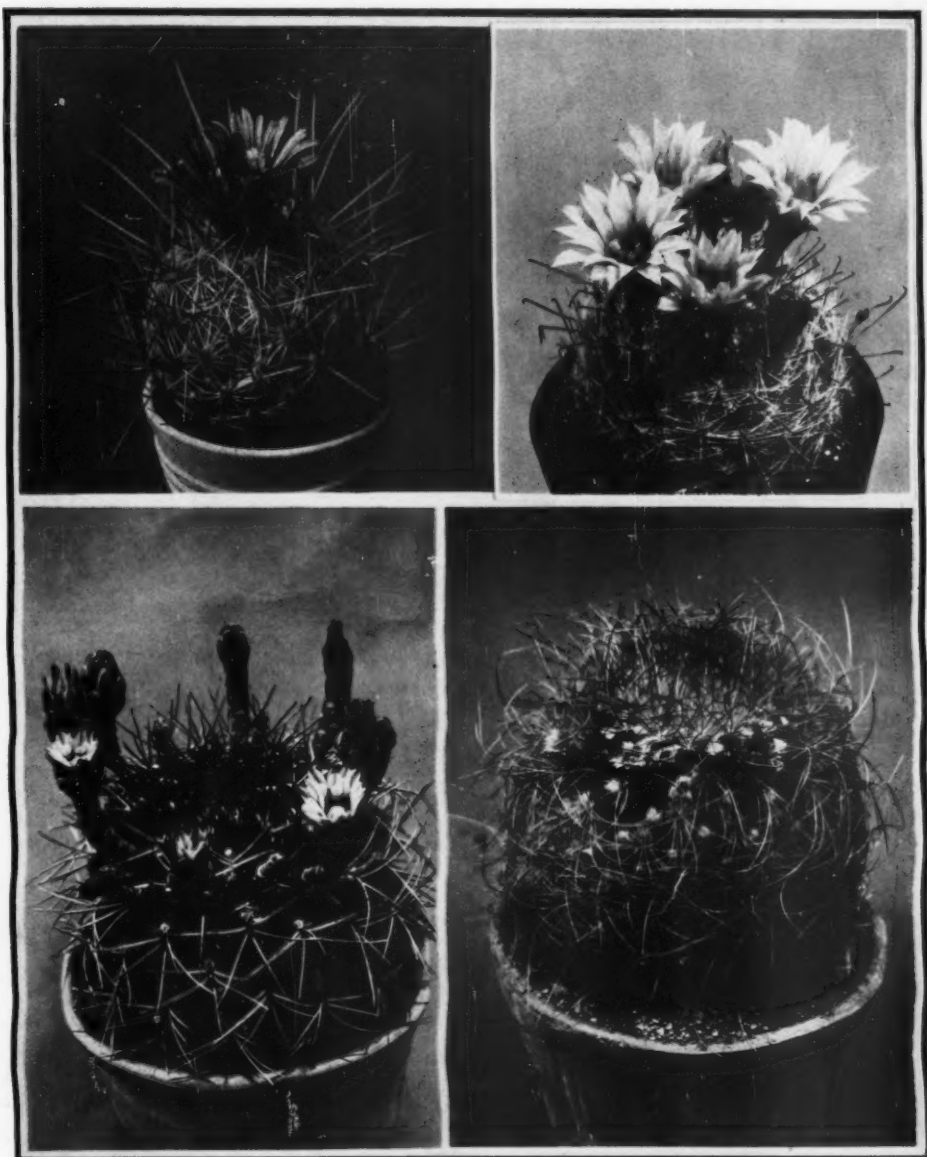
Huntington Botanic Gardens, Library and Art Gallery, San Marino, California, will remain open during the month of September. 22,710 visitors were admitted during the month of July; this was the highest attendance on record since the exhibitions were opened in 1928.



UPPER LEFT: A crested plant of *Opuntia prolifera* found on the coast at San Diego. Cresting is not usual in this species. The photograph is from McCabes' Cactus Garden in San Diego. LOWER LEFT: A grafted plant of *Malacocarpus leninghausii*, showing its abundant lemon-yellow flowers. CENTER: *Neomammillaria scrippsiana* (author unknown, if described), a plant from Mexico related to *Neomammillaria spinosissima*. UPPER RIGHT: *Echinocereus merkeri*, a long-tubed, scarlet flowered rarity from Mexico. Several of this type of *Echinocereus* have recently come to collectors' attention and are creating much interest. The four pictures are from McCabe Cactus Gardens, San Diego, Calif. LOWER RIGHT: *Ferocactus stainesii* (Hooker) Britton & Rose (*Echinocactus pilosus* Galeotti). This picture is from Mrs. A. F. Moeller who says "The old man in the center of picture is the late Dr. Walther of Parras, Coahuila, who discovered *Echinocereus delaetii*. The picture shows *Echinocactus 'pilosus'* growing naturally."

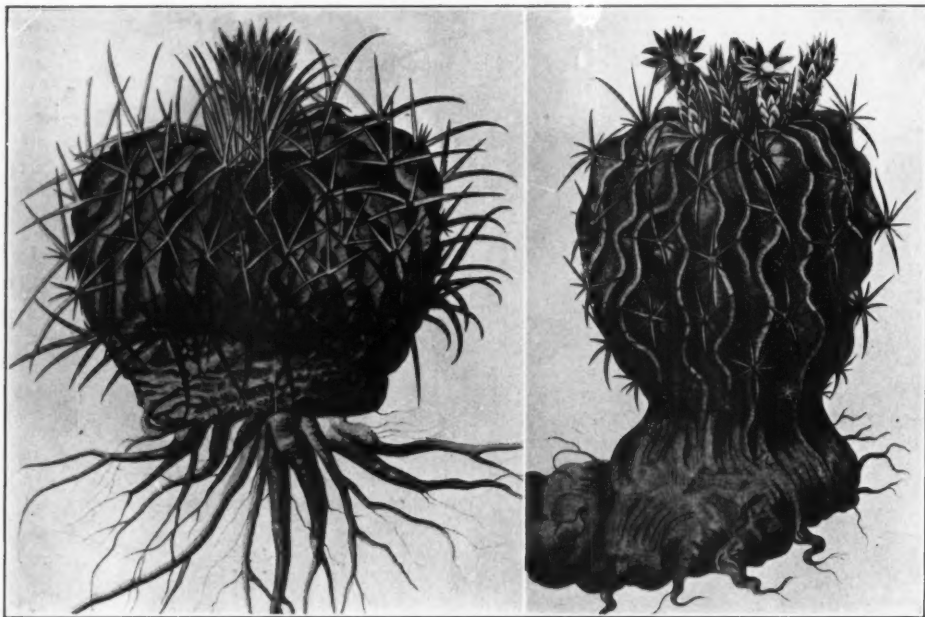
"CALIFORNIA CACTUS"

100 pages and 85 illustrations, 1 in color, of the cactus native to California. 2 new species described. An attractive book reasonably priced at \$1.50. Send check or money order to author, E. M. Baxter, Bellflower, California, or to Abbey San Encino Press, 6162 No. Figueroa St., Los Angeles. Immediate delivery.



FLOWERING CACTUS—RARE AND BEAUTIFUL

UPPER LEFT: *Thelocactus conothele*, a photograph from Herman Tobusch, Illinois. LOWER LEFT: *Gymnocalycium schickendantzii* with snake-like flower buds. Scales on the flower tube are without hair or spines. This picture and the adjoining from Mr. Tobusch. UPPER RIGHT: *Neomammillaria longiflora* Br. & R. This extremely interesting species is still rare in cultivation. The pink flowers are larger than those of any other *Neomammillaria*; they remain open for 2 or 3 days. The species does rather well in cultivation under glass. Photo by F. M. Knuth. LOWER RIGHT: *Neomammillaria pringlei*, a Mexican species with twisted, fine spines and a beautiful plant even when not in flower.



Echinofossulocactus obvallatus and *E. crispatus* as illustrated in Britton and Rose. These illustrations appeared in Paris nearly a hundred years ago.

CONSERVATION?

To one who appreciates a cactus landscape, the road from Casa Grande to Tucson in Arizona is perhaps the most enjoyable 60 miles in the entire west.

We were driving on this road at a fairly rapid speed a few weeks ago when in the distance we saw a speck that later proved to be a typical desert gas station. Our gas tank was over half full, plenty gas to take us to Tucson, but this particular station was different in that the owner had two large signs, one facing in each direction which read: "A FREE CACTUS GIVEN AWAY

WITH EVERY 5 GALLONS OF GASOLINE."

We stopped, ordered 5 gallons and demanded our free cactus. The man studied us for a moment then said, "I haint got nary one now, but will yer wait till I go out yonder and git yer one?" We agreed to wait and in about five minutes he returned with a small plant of *Echinocereus engelmannii* which he smilingly offered us. We registered disappointment and told him what we had expected was one of those 15 foot high giant cactus and we felt that we were being treated dishonestly. We drove away, however, when he said, "Gosh sakes, yer think I'm crazy." G. A. FRICK.

FINAL NOTICE FOR BINDING CACTUS JOURNALS, Vol. VI

Remove the Britton and Rose center sections and mail (Parcels Post—not first class) or Express, your JOURNALS to Cactus Society, Att. G. A. Frick, 1800 Marengo St., Los Angeles, Calif. Back volumes of the JOURNAL may be sent at the same time. Enclose \$1.50 for each volume and 35c for each missing copy (we cannot guarantee to furnish all missing copies, but will do so if available). If you have not had your Volume I of Britton and Rose bound, you may do so by sending \$2 additional. Send to the above address only. No magazines can be received after August 31st.

Paul G. Olsen of Tucson, Ariz., has recently purchased the Harris collection of cacti and succulents which gives him the outstanding commercial collection in Arizona.

LONG BEACH CACTUS SHOW

The Long Beach Cactus Club, under the able leadership of its President, J. F. Kaufman and Manager J. N. Nutter, held an enviable two day show which opened July 27th. The 3000 feet of floor space was filled with specimen plants and rare cacti from great distances.

The excellent show standard of the plants and the many flowering specimens attracted unusual interest. Well known collectors and members of the Cactus and Succulent Society cooperated in making this show a great success.

FAMOUS WORDS AT ANY CACTUS
SHOW

"How can I make my Christmas Cactus flower?"

Will someone please answer this fully for the September issue and it is suggested that every dealer in the United States imprint the formula on the back of his business card!

BOOKS

Mail Address: THE CACTUS JOURNAL, 6162 North Figueroa St., Los Angeles, Calif.

CACTUS—By A. J. Van Laren \$ 5.00

A companion volume to "Succulents" with similar imported color prints of 150 different cacti. Bound in cloth. Numbered edition of 1000 copies. In addition to the above, there are 500 sets of "Cactus" and "Succulents" bound in harmonious cloth bindings priced at \$10.00 per set. "Succulents" sold separately for \$7.50.



THE CACTUS BOOK

by
A. D. Houghton

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